resistivity will depend upon which cationic resin is used, and since the resins used in Idei et al. are the same as used in the instant application, the surface resistivity would be expected to be the same.

Applicants respectfully disagree with this rejection. Applicants admit that, as the Examiner states, Idei uses the same resin as that used in the present invention. However, this does not mean that the ink jet recording sheet of Idei has the surface resistivity specified in the present invention. Applicants note that surface resistivity is determined not only by kind of resin but also by other factors such as kind of support, amount of resin, etc. As seen from Examples 7 and 19 of the present application, surface resistivity varies considerably depending on kind of support and other factors.

Because of the statements above, it can not be said that the ink jet recording sheet of Idei et al. inherently has the same specific surface resistivity as the claimed invention. In the present invention, the cation equivalent the cationic resin is adjusted to 3-8 meq/g to obtain the specific surface resistivity of $1.0x10^{9}$ - 9.9×10^{13}.

The above technical concept of the present invention is not disclosed or suggested by Idei et al. Therefore, Applicants submit that the present invention is patentably distinct from Idei et al.

Claim Rejections Under 35 U.S.C. §103(a)

Claim 1 is rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,279,961 to Fujioka et al.

The Examiner asserts that Fujioka et al. discloses a recording material with a base sheet and an increased surface resistivity. Fujioka et al. discloses cationic resins and a surface resistivity of

10^6 to 10^{10} ohms by dry weight. The Examiner assert that although Fujioka et al. does not explicitly disclose the dry adhering amount, it would have been obvious to one of ordinary skill in the art to optimize the components because discovering the optimum or workable ranges is routine. The Examiner further asserts that the dry adhering amount is also based on the resin used and would be easily determined by one of ordinary skill in the art.

Applicants respectfully disagree with this rejection. While Fujioka et al. teaches paper having a surface resistivity of 10^6 to 10^{10} ohms, using an amount of resin that is 2 to 20 g/m^2, Applicants note that there is no suggestion to go outside this range. Claim 1 requires a surface resistivity of 10^9 to $9.9\text{x}10^{13}$ ohms, using an amount of resin that is 0.5 to 2.0 g/m^2. While the amount of coating in Fujioka et al. overlaps that of the claim, there is simply no suggestion for the use of any amount of coating of less than 2.0 g/m^2. In fact, the reference specifies that the preferred amount is 5.0 to 20 g/m^2. Applicants submit that the overlap between Fujioka et al. and the claimed invention is minuscule (i.e., only at exactly 2.0) and arguably zero.

While it may have been true that it would have been obvious to one of ordinary skill in the art to optimize components, there would still have to be shown a suggestion to optimize the ranges, and a likelihood of success upon doing so. As stated above, Fujioka et al. contemplates a coating amount of 2 to 20 g/m^2 giving a surface resistivity of 10^6 to 10^{10} ohms. Therefore, even if there were shown a suggestion to optimize, one skilled in the art would not have reached from Fujioka et al. the parameters of the amended Claim 1, that is, a surface resistivity of 10^9 to $9.9\text{x}10^{13}$ ohms, using an amount of resin that is between 0.5 and 2.0 g/m^2.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujioka et al. in view of U. S. Patent No. 5,681,643 to Noguchi et al.

The Examiner asserts that Noguchi et al. teaches a recording medium with a cation equivalent measured by means of a colloid titration. Noguchi et al. shows that using the colloidal titration method to find cation equivalent is well known in the art. The Examiner further asserts that it would have been obvious to one of ordinary skill in the art to include the cation equivalent measured by colloidal titration method with the recording material of Fujioka et al. in order to increase the surface resistance properties of the recording material.

Applicants respectfully disagree with this rejection. Applicants note claim 2 has been canceled and its limitations added to claim 1, and will therefore address comments to claim 1. Applicants note that the limitation as to the testing method in Claim 1 is not a production process but a method of measuring the cation equivalent. Applicants are not implying that the test method is novel. Rather, the claim requires only that the cation equivalent of the resin is 3-8 meq/g when tested by a particular method. The fact that a reference teaches about this method is immaterial to the present claim, absent a suggestion to use a coating that shows the claimed range of cation equivalent, and there is no suggestion in Noguchi et al. or Fujioka et al. to use a resin that shows a cation equivalent that is 3-8 meq/g when tested by the colloidal titration method. There is only a suggestion to measure a cation equivalent of a selected resin by the colloidal titration method.

For at least the foregoing reasons, the claimed invention as amended distinguishes over the cited art and defines patentable subject matter. Favorable reconsideration is earnestly solicited.

Should the Examiner deem that any further action by Applicants would be desirable to place the application in condition for allowance, the Examiner is encouraged to telephone Applicants' undersigned attorney.

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees which may be due with respect to this paper, may be charged to Deposit Account No. 01-2340.

Respectfully submitted,

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Version With Markings to Show Changes Made

IN THE CLAIMS:

Please cancel claim 2.

Please amend claim 1 as follows:

1. (Amended) A paper for ink jet and electrophotographic recording which comprises a support having a cationic resin adhered thereto in a dry adhering amount of 0.5-2.0 g/m^2 and which has a surface resistivity of 1.0×10^9 - 9.9×10^{13} Ω, wherein the cationic resin has a cation equivalent of 3-8 meq/g as measured by colloidal titration method.